

Anti-VSP (Vegetative Storage Protein 1)(At) antibody, rabbit polyclonal

Product code	81-126
Size	100 µg
Storage	-20°C
Concentration	2.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from rabbit antiserum.
Immunogen	<i>Arabidopsis thaliana</i> recombination His6 - VSP1
Isotype	Rabbit IgG
Reactivity	<i>Arabidopsis thaliana</i> VSP1 protein. Can react with VSP2 proteins whose sequences are very similar (86% identity). Not tested in other plant species, but likely to react with VSP1 of related species.
Special notes	<p>Tissue Specificity: It is expressed in leaves and genitalia, particularly in style, basal and distal ends of the ovarioles, and.</p> <p>Subcellular Localization: Vacuoles</p> <p>Expression: The promoter from Vsp 1 expressed its efficacy in pistils, particularly in the mode, at the base and distal end of the ovary, and in silique, whereas the promoter from Vsp 2 showed its activity in vegetative shoots, petioles, petioles and recipient organs of floral organs. These findings suggest that the expression of Vsp 1 and Vsp 2 may be developmentally regulated in <i>A. thaliana</i>.</p>
Application	1. Western blotting (1/1000 to 1/2000).
Background	VSP1 (nutrient storage protein 1) may function as a somatic storage protein during early seedling development. Synthesized as a 270 aa protein, the signal peptide with 17 aa is removed in the mature form. Glycosylation is made at amino acids 115 and 215.
Data Link	UniProtKB P29525 (OLEO1_ARATH)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 81-126 Anti-VSP (Vegetative Storage Protein 1, At) antibody, rabbit polyclonal

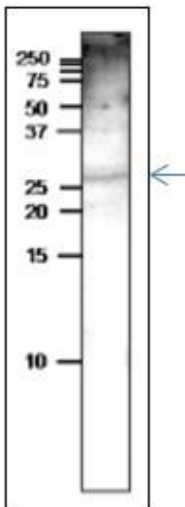


Fig 1 Arabidopsis Western blot of VSP in total extracts.

Crude extracts of mature siliques of *Arabidopsis thaliana* were run on SDS - PAGE (15 %) and blotted to PVDF membranes by wet-system. Was blocked with 3% skimmed milk. Anti VSP Ab was used at 2 μ g/ml. Secondary antibodies (goat anti-rabbit IgG antibody HRP binding, ab97051) were used at 1/10,000 dilutions. The molecular weight of VSP1 is 28 kDa

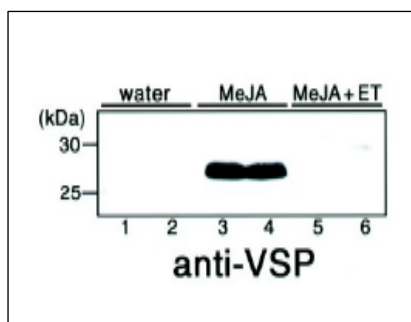


Fig.2 VSP showing induced VSP by MeJA (Western blot)

Derivative extracts of ER in rosette leaves treated with MeJA were subjected to SDS-PAGE and immunoblotted with anti VSP Ab. Lanes 1 and 2, water treatment; lanes 3 and 4, 50 μ M MeJA treatment; lanes 5 and 6, 50 μ M MeJA plus 20 μ l/L ethylene treatment for 36 h.

Reference. This antibody was described in Ref.1 and used in the following publications.

1. Matsushima R et al. An endoplasmic reticulum-derived structure that is induced under stress conditions in *Arabidopsis*. *Plant Physiol.* [\(Link\)](#) 2002 Dec;130(4):1807-14. PMID: 12481064 [\(Link\)](#) WB (*Arabidopsis*)
2. Yamada K, Nishimura M, Hara-Nishimura I. The slow wound-response of γ VPE is regulated by endogenous salicylic acid in *Arabidopsis*. *Planta* [\(Link\)](#) 218, 599–605(2004) PMID: 14600834 [\(Link\)](#) WB (*Arabidopsis*)